

General description of the setup ... 31513
S/627/60/002/000/001/027
D299/D304
ASSOCIATION: Nauchno-issledovatel'skiy institut yadernoy fiziki
MGU, Moskva (Scientific Research Institute of Nuclear Physics Moscow State University, Moscow)

Card 7/7

STRUGAL'SKIY, Z S.

31526
S/627/60/002/000/008/027
D299/D305

3.9410 (1559, 2205, 1705)

AUTHORS:

Vernov, S. N., Goryunov, N. N., Dmitriyev, V. A., Ku-
likov, G. V., Nechin, Yu. A., Solov'yeva, V. I., Stru-
gal'skiy, Z.S., and Khristiansen, G. B.

TITLE:

Study of lateral-distribution function of charged par-
ticles and of the energy density of the electron-photon
component of extensive air showers

SOURCE:

International Conference on Cosmic Radiation. Moscow,
1959. Trudy. v. 2. Shirokiye atmosferynye livni i kas-
kadnyye protsessy, 117-122

TEXT: The data obtained by means of the diffusion chamber and the
hodoscoped counters permit determining the particle distribution in
the neighborhood of the shower axis as well as at large distances
from it. These data can be used for determining the number of par-
ticles and the position of the axis to an accuracy of approximately
1 m by means of the hodoscoped counters, and to an accuracy of se-
veral centimeters if the axis lies within the limits of the diffu-

Card 1/5

Study of lateral-distribution ...

31536
S/627/60/002/000/008/027
D299/D305

sion chamber. The electron-photon component at large distances from the axis was studied by means of large ionization chambers, shielded with lead. During 1000 hours of operation, 28 cases were recorded of the axis (of showers with number of particles $N \geq 10^5$) passing through the core detector. All these showers were investigated in detail with respect to distribution and energy of particles. The cases most favorable for analysis are those, in which the shower axis lies in the diffusion chamber. In all, 7 such cases were recorded. For each of these showers, the lateral-distribution function of particle density was constructed for distances ranging from 5 cm to 1 m from the shower axis. It was found that the form of the distribution function varied from shower to shower in the core region. In that region, a peculiar feature of particle distribution was observed, namely a narrow beam (4 cm in diameter) of particles, consisting of a large number (4 to 15) of particles with collinear tracks. From data obtained by means of the hodoscoped counters and knowing the position of the shower axis, it is possible to construct the distribution function of charged particles up to a distance of $r = 25$ m. from the axis, for each individual

Card 2/5

Study of lateral-distribution ...

31526
S/627/60/002/000/003/027
D299/D305

4

Shower. Then the experimental distribution functions were compared with the theoretical functions of Nishimura and Kamata. The results of the comparison are shown in a table. A difference was noted in the form of the distribution of the energy flux of the electron-photon component in the individual shower at a distance of $r \sim 1$ m, and at large distances from the axis; this is due to local fluctuations in the form of the energy distribution in the core. In each of the investigated showers, the energy flux of the electron-photon component was found within a radius of 25 m; it turned out that the electron-photon component energy-flux was stronger (on the average) in showers with small s , than in showers with large s (s being the "age parameter"). The system of counters permitted recording showers with number of particles $N = 10^4$ to 10^7 . The data yielded by the diffusion chamber were used for constructing the distribution function for distances $r < 1$ m from the shower axis. The conclusion was reached that the form of the electron-photon energy distribution-function does not depend on the number of particles in the shower. Therefore, all the data were referred to a shower with same N , and the average energy-density distribution.

Card 3/5

4

Study of lateral-distribution ...

31536
S/627/60/002/000/008/027
D299/D305

tion constructed. Approximating this distribution by a power law of type r^{-n} , one obtains for the exponent n the following values (as a function of the distance r from the axis):

$n = 1,2 \pm 0,2, \quad 0,1 < r < 1 \text{ m}$
 $n = 1,5 \pm 0,2, \quad 1 < r < 10 \text{ m}$
 $n = 2,0 \pm 0,3, \quad 10 < r < 60 \text{ m}$
 $n = 2,6 \pm 0,2, \quad 60 < r < 1000 \text{ m}$

4

Further, the mean energy per electron was obtained from experimental and theoretical values (based on the cascade shower theory) of the mean energy as a function of r showed a discrepancy which can be removed by taking into account the effect of nuclear scattering. The experimental values permit calculating the energy of the

Card 4/5

4

Study of the lateral-distribution ...
31525
S/627/60/002/000/008/027
D299/D305

electron-photon component, viz. $E_{\text{eph}} = 2.5 \text{ BN}$, where B denotes the mean energy loss per unit of depth t . There are 2 figures, 1 table and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: J. Nishimura, K. Kamata. Suppl. Theor. Phys., no. 6, 1958.

4

Card 5/5

21(7)

AUTHORS:

Yermov, S. N., Goryunov, M. K., Gatsupin, G. A., Kulikov, G. P.,
Rechka, Ye. A., Strugalskiy, Z. S., Kristiansen, G. B.

TITLE:

Investigation of the Core of Extensive Atmospheric Showers
(Issledovaniye yadra shirokogo atmosfornogo liza)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959,
Vol 36, Nr 3, pp 669-681 (USSR)

ABSTRACT:

The group of research scientists followed a suggestion made by D. V. Skobel'tsyn to investigate the passage of extensive atmospheric showers through matter simultaneously in different depths; in this connection an investigation of the shower core was carried out. Figure 1 shows a photograph of the experimental arrangement used, which furnished information concerning the electron-photon and the nuclear-active components of the shower core. The experimental system consisted essentially of a diffusion chamber (0.64 m²), 124 ionization chambers in a hodoscope-connection, special filters and 672 Geiger-Müller (Gayer, Müller) hodoscope counters of different sizes. The method, which is described in detail, is described in detail.

Card 1/4

and the possibilities it offers are discussed. The entire device remained in operation for 1500 hours and recorded more than 10,000 passages of showers through matter. Within 1,000 hours 26 passages of shower cores with a shower particle number of $N > 10^5$ through a first row of ionization chambers were recorded. Figure 4 shows a photograph of the diffusion chamber for such a passage and the corresponding pulse oscillations of the ionization chambers. The article gives numerous individual data concerning different showers, the energy distribution in the 64 ionization chambers of the first and second row respectively for $N = 5 \cdot 10^5, 1.5 \cdot 10^6$ and $N \approx 10^7$ with a spatial distribution of energy flux $\sim 1/r$ (Fig 6). Figure 8 shows the same, expressed by the number of relativistic particles passing through the ionization chambers of the first and second row for $N = 10^4$ and $2 \cdot 10^4$ and an energy flux $\sim 1/r^2$ and $\sim 1/r$. Figures 6 and 8 show the particle flux distribution in the diffusion chamber for $N = 2 \cdot 10^6$ and $3.5 \cdot 10^4$ respectively. In extensive air

Card 2/4

showers with $N > 10^5$ it was observed in the shower core ($r < 1a$) that the total energy of nuclear-active particles is of the order of the energy of the electron-photon component at the same distance from the axis for individual showers, however, the ratio of the energy of the nuclear-active component to the energy of the electron-photon component shows an increase of up to $r = 20 \cdot 10^3$ from the shower axis; the course of energy flux density in dependence on r cannot be represented by a general formula; it fluctuates between $\sim 1/r$ and $\sim 1/r^2$. The energy fluxes of electron-photon and nuclear-active components of the shower core show considerable fluctuations (up to 10 times). The authors finally thank Academician D. V. Skobel'tsyn for his help and interest, V. T. Poritskiy for his collaboration, Professor N. A. Dorozin for his help and discussions, and further also a group of collaborators of the MSU: A. T. Abramov, D. S. Glazovskiy, S. V. Subbotin, A. D. Terlykhin, A. B. Kuznetsov, E. R. Sazonov for their help in carrying out experiments. There are 6 figures, 2 tables, and 12 references, 11 of which are Soviet.

Card 3/4

ABSTRACTED FROM: Zhurnal eksperimental'noy i teoreticheskoy fiziki, Moscow State University, Fizicheskii Institut im. P. L. Kapitza, Moscow, 1959, 36, 3, pp. 669-681, 12 refs. (Physics Institute im. P. L. Kapitza, Moscow, USSR)

RECEIVED: July 21, 1959

KONOVALOVA, L.P.; OKHRIMENKO, L.S.; STRUGAL'SKIY, Z.S.

Determining the energy of gamma-ray quanta in a xenon bubble chamber. Prib. i tekhn. eksp. 6 no.6:26-31 N-D '61. (MIRA 14:11)

1. Ob'yedinennyy institut yadernykh issledovaniy. 2. Institut yadernykh issledovaniy, Varshava (for Strugal'skiy).
(Bubble chamber)
(Gamma rays)

ACCESSION NR: AP4011477

P/0045/63/024/004/0509/0513

AUTHOR: Czyzewski, O.; Danysz, J.; Strugalski, Z.

TITLE: Photon energy measurement in xenon bubble chamber in the energy interval 20--1000 MeV

SOURCE: Acta physica polonica, v. 24, no. 4, 1963, 509-513

TOPIC TAGS: Photon energy measurement, xenon bubble chamber, cascade process, positron track, electron range

ABSTRACT: The paper presents a quick and simple method of measuring the photon energy in a xenon bubble chamber in the interval 20--1000 Mev, being a development of the method proposed by Strugalski (Dubna, 1961) and based on the principle that the sum of all ranges of electrons generated in the cascade process initiated by photons is approximately proportional to the photon energy. The difficulty of measuring the coordinates of many points on the track (as necessitated by the strong coulomb scattering to determine the length of the track by the ordinary method) was avoided by measuring the total length of all electron

Card 1/3

ACCESSION NR: AP4011477

tracks in the photo on the screen of the scanning projector, using the curvimeter. The ranges of 272 positrons were measured, taking into account only those cases in which the mean angle between the positron track and the photograph plane was less than 40° . One hundred cascades, properly situated in the chamber, fulfilled the criteria: 1) the photograph is not overloaded with tracks not correlated with the cascade; 2) the cascade develops fully inside the chamber; 3) the angle between the cascade axis and the photograph plane is less than 25° . Some of the high-energy cascades (above 600 Mev) did not fulfil condition 2, and only a part of the energy was measured directly. To estimate the photon energy, one must measure the sum of ranges of electrons and the "development length" ($= d =$ "distance between the photon conversion point and the boundary of the visible volume, measured in the direction of photon flight"), determined by the chamber geometry, visibility conditions, presence of the background of other cascades, etc. These two parameters can be used to determine the photon energy from fig. 3, where the sum of the ranges of electrons is plotted against " d ". The upper limit of error due to ionization and radiation straggling is 20% divided by the square root of the number of secondary pairs. Fig. 4 shows the dependence of the fluctuation error on " d ".

Card 2/3

ACCESSION NR: AP4011477

"The authors are indebted to Dr. L. M. Gramenitskii for helpful discussions and to Dr. J. Loskiewicz for valuable suggestions."

Original has 5 graphs.

ASSOCIATION: Joint Institute of Nuclear Research, Dubna, SSSR.

SUBMITTED: 20Apr63

DATE ACQ: 22Jan64

ENCL: 00

SUB CODE: PH

NO REF SOV: 000

OTHER: 002

Card 3/3

L 15528-63

EWI(m)/BDS AFMTC/ASD

ACCESSION NR: AP3005235

S/0056/63/045/002/0013/0017

AUTHORS: Nichiporuk, B.; Strugal'skiy, Z. S.

TITLE: Investigation of fluctuations of electron-photon showers in xenon

SOURCE: Zhur. eksper. i teoret. fiz., v. 45, no. 2, 1963, 13-17

TOPIC TAGS: electron-photon shower, xenon, longitudinal development, shower maximum, bubble chamber, Xe

ABSTRACT: The electron-photon showers produced by gamma quanta resulting from the decay of neutral pions, created in interactions between 9-BeV/c negative pions and xenon nuclei, were investigated in a 30-liter xenon bubble chamber, with an aim at tracing in detail the development of the shower over its entire depth and at studying the fluctuations in the longitudinal development of the shower. The average total shower energy was 4 BeV. The procedure was based on an experimental determination of the variation of the average number of the electrons and photons and their mean-square fluctuations due to the gamma quanta with the depth of the shower. The experimental results agreed well with the cascade curve calculated for the xenon. The position of the maxima of the shower

Card 1/4

L 15528-63

ACCESSION NR: AP3005235

2
development fluctuate between 4 and 7 radiation lengths (3.8 cm for xenon) with an average of 5 radiation lengths. The fluctuations in showers with total energy 4 BeV are minimal in xenon near the maximum of shower development. "The authors are grateful to I. M. Gremenitskiy for discussions."
Orig. art. has: 1 figure and 2 tables.

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: 07Jan63

DATE ACQ: 06Sep63

ENCL: 002

SUB CODE: PH

NO REF SOV: 006

OTHER: 022

Card

2/4 2

L 2120-66 ENT(m) DIAAP/AFWL/ESD/ESD(t)
ACCESSION NR: AP4046389

S/0056/64/047/003/0801/0805

AUTHORS: Gramenitskiy, I. M.; Okhrimenko, L. S.; Slovinskiy, B.; Strugal'skiy, Z. S. ¹⁶₁₁

TITLE: Estimate of the cross section for the charge exchange of negative pions on quasi-free protons at 9 GeV/c

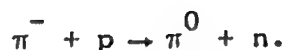
¹⁹
SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47, no. 3, 1964, 801-805

TOPIC TAGS: charge exchange, pion proton scattering, exchange cross section, elastic scattering, bubble chamber

ABSTRACT: In view of the scarcity of data on the exchange scattering of negative pions by protons in the energy region of several GeV, the authors investigated the exchange scattering of 9 GeV/c negative pions by quasi-free protons in a xenon bubble chamber, with an aim at investigating the charge-exchange reaction

Card 1/3

L 2120-65
ACCESSION NR: AP4046389



(1)

This was done by scanning twice the photographs obtained in the bubble chamber, and selecting all the prongless stars within a small region of the chamber. A total of 116 such events were selected from 55,000 stereo photographs. The angles between the γ quanta and the angles between the γ -quantum direction and the direction of the primary negative pion track were measured. Much attention is paid to the separation of the background events and the events which can be mistaken for the investigated charge-exchange reaction. The final estimate for the reaction (1) is found to be 0.48 ± 0.18 mb for scattering by xenon and 0.04 ± 0.09 mb for scattering by the exchange quasi-free proton. In the case of pions of 200 MeV energy, the exchange cross section is -0.03 ± 0.03 mb. This indicates that the elastic charge exchange of pions at 9 GeV/c is vanishingly small. The authors thank Ye. Bogdanovich, V. G. Grishin, and M. I. Podgoretskiy for useful discussions, and also N. Smirnova and L. Mas-

Cord 2/3

121000
ACCESSION NR: AP4046389

lova and G. Stroykova for help with the work." Orig. art. has: 3
figures, 4 formulas, and 1 table.

ASSOCIATION: Ob"yedinenny*y institut yaderny*kh issledovaniy
(Joint Institute of Nuclear Research)

SUBMITTED: 21Mar64

2
ENCL: 00

SUB CODE: NP

NR REF SOF- 007

OTHER: 008

Card 3/3

GRAMENITSEV, I.M.; OKHRIMENKO, I.S.; SLOVINSKIY, B.; STRUGAL'SKIY, V.S.
[Strugalski, Z.]

Estimation of the charge-exchange cross section of π^- -mesons on
quasi-free protons at 9 GeV/c. Zhur. eksp. i teor. fiz. 47 no.
3:601-605 S '64. (MIRA 17:11)

1. Ob'yedinennyy institut yadernykh issledovaniy. 2. Sotrudnik
Varghavskogo Instituta yadernykh issledovaniy. Pol'sha (for Strugal's-
kiy).

KHODIYEV, E.M., assistant; STRUGANOV, A.G., dotsent

Congenital arteriovenous aneurysm of the left forearm simulating
a traumatic aneurysm. Med. zhur. Uzb. no.1:87-88 Ja '62.
(MIRA 15:3)

1. Iz kafedry fakul'tetskoy khirurgii sanitarnogo i
pediatricheskogo fakul'tetov (zav. - prof. V.K. Yasevich)
Tashkentskogo gosudarstvennogo meditsinskogo instituta.
(ANEURYSM)
(ARM—BLOOD SUPPLY)

SECRET . . . V.

On 11/11/61, the following information was received from the
Director, Central Intelligence Agency, Washington, D.C.
11/11/61, 11/11/61.

Subject: [REDACTED] (11/11/61) L. [REDACTED]
[REDACTED], [REDACTED], [REDACTED].

1.1.1, 1.1.v

Condition of railroad transportation in France. : 31.

Service for highway freight cars. : 42.

Tramway, Sofia, Vol. 7, no. 4, 1955.

See: Monthly list of East European Accessions, (JML), 15, Vol. 4, n. 10, Oct. 1955,
Ibid.

STRUGANOV, K.V.

Lavr Dmitrievich Proskuriakov. Put' i put.khoz. no.12:41 D
'59. (MIRA 13:4)
(Proskuriakov, Lavr Dmitrievich, b. 1858)

STRUGAROV, Kh.

"Agricultural Cooperatives in the Village of Maslarevo Continue to Develop." p. 4,
(KOOPERATIVNO ZEMEDELIE, Vol. 10, No. 2, Feb. 1955, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4
No. 5, May 1955, Uncl.

STRUGAROV, KH.

AGRICULTURE

Periodical: OTCHETNOST I KONTROL NA SELSKOTO STOPANSTVO. Vol. 3, No. 3, 1958.

STRUGAROV, KH. Giving accounts for the first four months on the cooperative farms. p. 84.

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 2
February 1959, Unclass.

TITEICA, R.; IALADE, Gh.; BANATEANU, Gh.; STRUGARU, Al.

Research on the absorption spectrum of Congo red. Bul
Inst Petrol Rum 9: 189-197 '63.

ROGOJAN, Al.; POP, E.; STRUGARIU, G.

Impulse characteristics of some cores of Rumanian ferrites.
Studii tehn Timisoara 10 no.1:93-99 Ja-Je '63.

STRUGARU, C.; ISTIATE, I.

Products resistant to high temperatures, moisture, and
dynamic stresses based on butyl rubber. Rev chimie Min petr
14 no.7:391-397 J1 '63.

SHUGARU, G.

A stabilized redresser with transistors. No. St of Tekh. Tin
9 no.2:533-538 21-D '64.

URSU, I.; STRUGARU, D.; PALADI, M.

Concomitant study of the isotopic exchange reactions and catalytic combustion of hydrogen in the Pt-C system.
Comunicarile AR 13 no. 9: 799-804 S'63.

1. Membru corespondent al Academiei R.P.R. (for Ursu).

BLUM, I.; DRAGANU, M.; IRINGAR, D.

Catalytic activity of some platinum-platinum trichloride
catalyzers for the hydrogen-methylic alcohol isotopic change.
Studii cerc. fiz. 14, no.4:421-427, '63.

1. Universitatea "Babeş-Bolyai" Catedra de electricitate,
magnetism şi fizică atomică, Institutul de fizică atomică Secţia
fiz. 2. Membru corespondent al Academiei R.S.R. (for USSR).

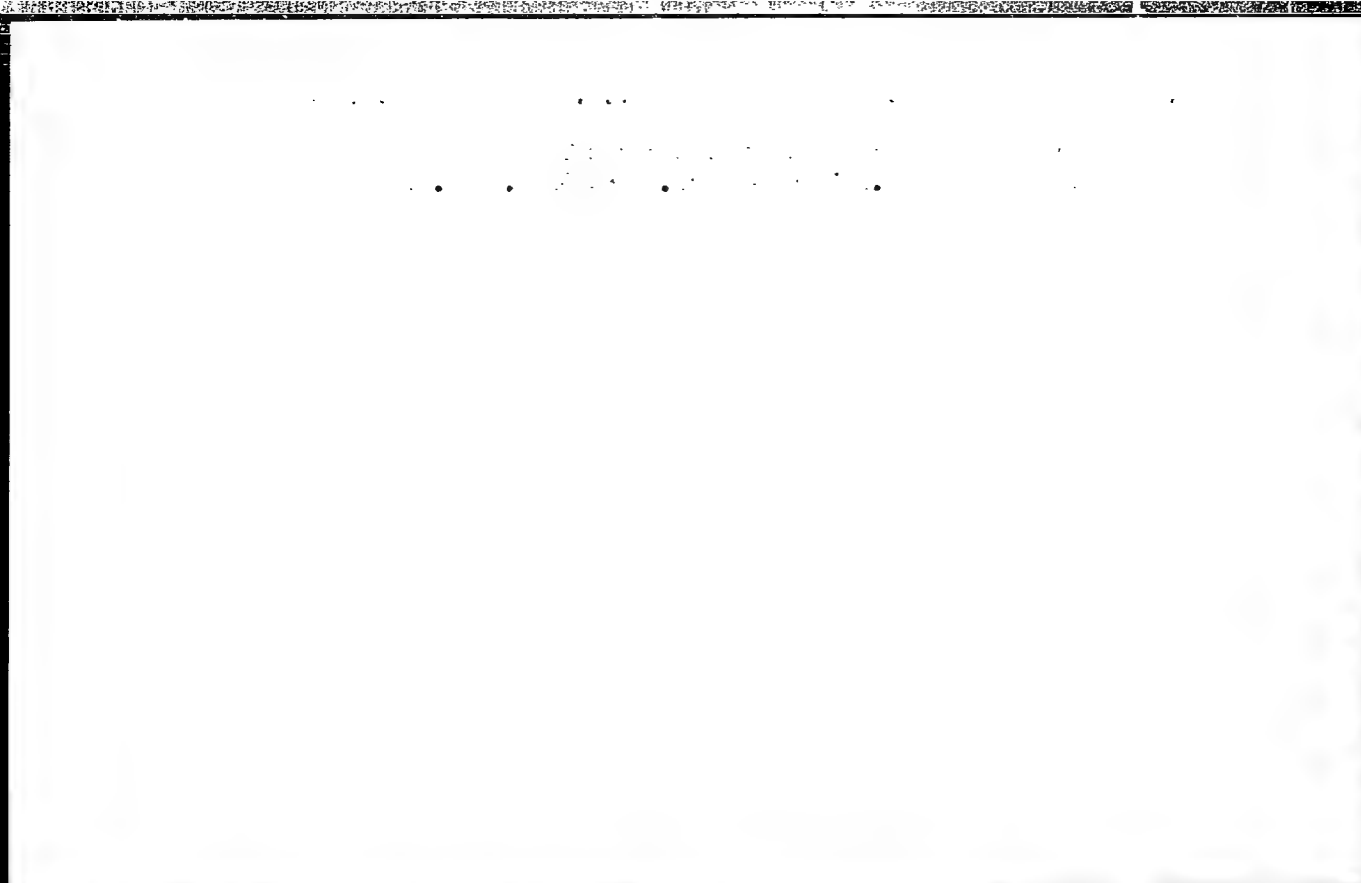
MARCULETEIU, V.T.; STRUGARU, I.

Recovery of bismuth from Rumanian concentrates, Bul Inst
Politeh 26 no.5:65-68 S-O '64.

1. Chair of Inorganic and Analytical Chemistry, Polytechnic
Institute, Bucharest.

"APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653610013-5



APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653610013-5"

L 08215-67 FSS-2/ENT(1) IJP(c) JGS/GW

SOURCE CODE: UR/0269/66/000/004/0018/0018

31

ACC NR: AR6025337

AUTHOR: Strugatskaya, A. A.

TITLE: Photographic observations of Venus on the mountain station GAO AN SSSR

SOURCE: Ref. zh. Astronomiya, Abs. 4.51.135

REF SOURCE: Tr. 16-y Astrometr. konfer. SSSR, 1963. M.-L., Nauka, 1965, 71-74

TOPIC TAGS: camera, planetary photography, Venus, astrometry, microscope/KIM-3 microscope

ABSTRACT: Observations were conducted in Dec 1962-Jan 1963 with the expedition astro-graph GAO AN SSSR (D=230mm, F=2.3m) using a planet camera of the Markovits lunar camera type (Ref. zh. Astr. 1964, 1.51.184). Plate evaluations(22) were made on the KIM-3 instrument with the eyepiece reticule in form of concentric circles, which, in the opinion of the author, should reduce the phase effect influence. A table and a graph of the O-C differences are given; on the deviations of the individual O-C values from the smoothed curve, the RMS errors were obtained (including catalogue errors of base stars): $\sigma_{\alpha} = \pm 0''.025$; $\sigma_{\delta} = \pm 0''.26$. Measurement errors of the intrinsic images of Venus are $\pm 0''.012$ and $\pm 0''.14$, and the error of one Venus position (depending upon catalogue positions and measurements of stars) is $\pm 0''.016$ and $\pm 0''.26$. [Translation of abstract].

SUB CODE: 03, 14

UDC 522.61:523.42

Card 1/1

BRONNIKOVA, N.M.; KISELEVA, T.P.; STRUGATSKAYA, A.A.; CHUDOVICHEVA, O.N.

Exact positions of minor planets computed from photographic
observations at Pulkovo. Biul. Inst. teor. astron. 10 no.1:
81-87 '65. (MIRA 18:12)

1. Submitted May 9, 1964.

STRUZATSKAYA, L.Ye.

Immunodiagnosis in intestinal helminthiasis. Izv.AN Uz.
SSR.Ser.med. no.4:95-100 '58. (MIRA 12:5)

1. Tashkentskiy gosudarstvennyy meditsinskiy institut.
(WORMS, INTESTINAL AND PARASITIC)

STRUGATSKAYA, L.Ye., assistant

Dermato-allergic and serological reactions with full-value
antigens in some types of helminthiasis. Med.zhur.Uzb. no.7:
31-34 JI '58. (MIRA 13:6)

1. Iz kafedry obshchey gigiyeny (zav. - prof. S.N. Babadzhanov)
Tashkentского gosudarstvennogo meditsinskogo instituta.
(ANTIGENS AND ANTIBODIES)
(WORMS, INTESTINAL AND PARASITIC)

STERNINA, L.Ye., Cand Med Sci -- (diss) "Study of
the diagnostic value of allergic and serological reactions
in ascariasis and teniarhynchosis ^{by} ~~infection~~ ^{infection} in man." Tashkent, 1959
10 pp (Min of Health USSR. Tashkent State Med Inst) 2:0 cc ies
(HL, 34-39, 116)

↑
nfe infection

- 111 -

SOV-1-98-8-11/85
AUTHOR: Strugatskiy, Boris and Strugatskiy, Arkadiy
TITLE: A Spontaneous Reflex (Spontannyj refleks)
PERIODICAL: Znanie-sila, 1958, Nr 9, pp 24-28 (USSR)
ABSTRACT: Fiction.
1 Literature--USSR

Card 1/1

AGEKYAN, T.A.; KAVRAYSKAYA, K.V.; PLYUGIN, G.A.; STRUGATSKIY, B.N.;
SHISHKINA, G.A.

An indication of the interaction of stars and diffuse matter.
Astron.zhur. 33 no.5:679-681 S-O '56. (MLHA 9:12)

1. Astronomicheskaya observatoriya Leningradskogo gosudarstvennogo
universiteta.
(Stars) (Interstellar matter)

POTTER, Kh.I.; STRUGATSKIY, B.N.

Asymmetry of the figure of major planets. Izv.GAO 23 no.1:145-150
'62. (MIRA 16:12)

L 40816-65 EWT(1)/EWG(v)/EEC-4/EEC(t) P-4/Pe-5/Pq-4/Pac-4/Pae-2 GS/GH
ACCESSION NR: AT5009180 UR/0000/63/000/000/0113/0116 42

AUTHOR: Polozhentsev, D.D.; Strugatskiy, B.N. 21

TITLE: Computation of ephemerides of the sun and planets of the earth group on computers for analysis of meridian observations 21

SOURCE: Astrometricheskaya konferentsiya SSSR, 15th, Pulkovo, 1960. Trudy. Moscow, Izd-vo AN SSSR, 1963, 113-116

TOPIC TAGS: ephemeris, sun, planet, meridian observation, Mercury, Mars, Venus

ABSTRACT: The Vychislitel'naya laboratoriya (Computation Laboratory) of the GAO AN SSSR was assigned the responsibility for preparing ephemerides of the sun and planets for each day in 1961-1965 for facilitating the analysis of meridian observations of these bodies. This paper briefly describes the preparation of these ephemerides. The authors note that the effective use of such ephemerides would be 3-8% for Mercury and Mars, 12-18% for Venus and 30-32% for the sun. Ephemerides for the sun were prepared by computing α and δ for the times of upper culmination at a particular observatory (with an accuracy to $0^s.01$ for α and $0''.1$ for δ), the correction for parallax, the time of passage of the

Card 1/3

L 40816-65

ACCESSION NR: AT5009180

half-diameter of the sun across the meridian, and the approximate zenith distance. For Venus and Mars the procedure involved computation of α and δ for the times of upper culmination at the particular observatory and the interpolation factor. For Mercury the computations included approximate α and δ for the times of the upper culmination at a particular observatory, the interpolation factor and the fourth and fifth differences of coordinates. The initial data used were the geocentric ephemerides of the sun, Mercury, Venus and Mars for 0000 hours ephemeris time for each day of 1961-1965 prepared by the Institut teoreticheskoy astronomii AN SSSR (Institute of Theoretical Astronomy, AN SSSR). The sequence for computation of solar ephemerides consists of four steps: a) Computation of the interpolation factor for interpolation of α_0 , δ_0 and the radius vector for the time of the upper culmination at the meridian of a particular observatory; b) Computation of α_0 , δ_0 and the radius vector R_0 for the times of the upper culmination; c) Computation of zenith distances and parallax corrections; d) Computation of the angular half-diameter of the sun and the time of passage of the sun across the meridian. "In conclusion, the authors express sincere appreciation to N. M. Terent'yev, senior scientific worker at the Vychislitel'nyy tsentr LOMI AN SSSR (Computation Center, LOMI AN SSSR), K. N. Tavastsherna, senior scientific worker at the Glavnaya astronomicheskaya observatoriya AN SSSR (Main Astronomical Observatory AN SSSR), laboratory worker

Card 2/3

L 40816-65
ACCESSION NR: AT5009180

2
Z. T. Ratnikova and master mechanic V. A. Kuz'min for participation in the work of preparing the new ephemerides". Orig. art. has: 9 formulas and 2 tables

ASSOCIATION: None

SUBMITTED: 6Apr63

NO REF SOV: 001

ENCL: 00

SUB CODE: AA

OTHER: 001

Card

ce
3/3

Синдром, 1
ANDON'YEV, S.M.; ZHLOBINSKIY, Ye.I.; YUR'YEV, M.A.; STRUGATSKIY, L.F.;
YELISEYEV, B.V.; TSELUYKO; Yu.I.; SUVOROV, A.I.; FILIP'YEV, O.V.;
KALASHNIKOV, P.A.; L'VOV, V.N.; SULOYEV, V.A.

Evaporation cooling of rolling-mill heating furnaces in open-hearth-
furnace plants and complex utilization of secondary power resources.
Prom. energ. 14 no.1:37-39 Ja '59. (MIRA 12:1)
(Furnaces, Heating) (Boilers)

S/137/61/000/012/017/149
A006/A101

AUTHORS: Doroshev, Yu. P...Strugatskiy, L. F.

TITLE: A unit for vacuum treatment of steel during teeming into molds

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 56, abstract
12v338 ("Tr. Proyekt. tekhn. i n.-i..in-ta, Gor'kovsk. sovnarkhoz"
1960, no. 2 (4), 12 - 19)

TEXT: At the Gor'kiy Metallurgical Plant, a unit for vacuum treatment of steel in molds was designed, built and put into operation. (The ingot weight was 3.8 tons). The first-priority section of the unit is intended for vacuum treatment of X23H18 (Kh23Ni18) steel melted in medium capacity electric furnaces. The unit includes 2 vacuum (rotation) pumps type BH -6 (VN-6) and BH -4 (VN-4); a filter; a cooler (one pipe in another; the pumped-off gas passes through the inner pipe, the cooling water runs in the opposite sense through the outer pipe); a 15-m vacuum conductor; vacuum meters and a vacuum mold. In a conventional mold a recess is made at the junction with the riser. The riser differs from the conventional one by big bulgings at the top and lower portion, where grooves for the lid and a bulging for placing into the mold were chamfered. For the riser a

Card 1/2

S/137/61/000/012/017/149
A006/A101

A unit for vacuum treatment of...

steel lid was cast, onto whose top an intermediate funnel is welded. There is a special inspection hole with heat resistant glass in the lid and an exhaust tube, to which a rubber hose is fixed; the hose connects the mold with the vacuum conductor. The hole in the intermediate funnel is shut from below with a 1.5 mm Al plate. Residual pressure of 1.5 - 2.0 mm Hg is developed in the mold immediately before teeming. The vacuum in the mold is maintained until the metal ascends into the riser. The first tests have shown that vacuum teeming of Kh23N18 steel increased a_c by 20%; the H content decreased by 44%. ✓

P. Arsent'yev

[Abstracter's note: Complete translation]

Card 2/2

174

17

The molecular condition of the silicotungstates of the alkaloids. B. A. Klyachkina, M. K. Strugatzkii and F. D. Zilberg. *Dokl. Akad. Nauk SSSR*, 1931, 203-8; *Chem. Zentr.* 1932, I, 1576.—The titration of nicotine in HCl with silicotungstic acid indicates that the compound formed contains 1 mol. silicotungstic acid to 2 mols. nicotine. This titration can be used when the amt. of nicotine is not sufficient for acidimetric titration. Thebaine can also be titrated; it reacts with silicotungstic acid in the ratio 4:1. In this way a long series of alkaloids can be titrated very accurately, even when present in very small amts. Silicotungstic acid is tetra-basic toward the alkaloids; they combine with it in stoichiometric ratios 4:1 or 2:1. Silicotungstates having 5, 6, or more mols. of alkaloid per mol. of the acid are not known. Substances combining with the acid in the ratio 4:1 are: cocaine, methylecgonine, ecgonine, morphine, codeine, thebaine, papaverine, narcotine, hydrastine, atropine, piperine, harmaline, harmaline, pilocarpine and strychnine (in aq. soln.); in the ratio 2:1 are physostigmine, quinine, nicotine, emetine, cephaeline, anabasine, strychnine (in 15% HCl). Alkaloids with weakly basic N (disocn. const. less than 10^{-11}), which form no salts with acids in aq. soln., react with silicotungstic acid to form difficultly sol. salts.

M. G. Moore

17

15X

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

347

348

349

350

351

352

353

354

355

356

357

358

359

360

361

362

363

364

365

366

367

368

369

370

371

372

373

374

375

376

377

378

379

380

381

382

383

384

385

386

387

388

389

390

391

392

393

394

395

396

397

398

399

400

401

402

403

404

405

406

407

408

409

410

411

412

413

414

415

416

417

418

419

420

421

422

423

424

425

426

427

428

429

430

431

432

433

434

435

436

437

438

439

440

441

442

443

444

445

446

447

448

449

450

451

452

453

454

455

456

457

458

459

460

461

462

463

464

465

466

467

468

469

470

471

472

473

474

475

476

477

478

479

480

481

482

483

484

485

486

487

488

489

490

491

492

493

494

495

496

497

498

499

500

501

502

503

504

505

506

507

508

509

510

511

512

513

514

515

516

517

518

519

520

521

522

523

524

525

526

527

528

529

530

531

532

533

534

535

536

537

538

539

540

541

542

543

544

545

546

547

548

549

550

551

552

553

554

555

556

557

558

559

560

561

562

563

564

565

566

567

568

569

570

571

572

573

574

575

576

577

578

579

580

581

582

583

584

585

586

587

588

589

590

591

592

593

594

595

596

597

598

599

600

601

602

603

604

605

606

607

608

609

610

611

612

613

614

615

616

617

618

619

620

621

622

623

624

625

626

627

628

629

630

631

632

633

634

635

636

637

638

639

640

641

642

643

644

645

646

647

648

649

650

651

652

653

654

655

656

657

658

659

660

661

662

663

664

665

666

667

668

669

670

671

672

673

674

675

676

677

678

679

680

681

682

683

684

685

686

687

688

689

690

691

692

693

694

695

696

697

698

699

700

701

702

703

704

705

706

707

708

709

710

711

712

713

714

715

716

717

718

719

720

721

722

723

724

725

726

727

728

729

730

731

732

733

734

735

736

737

738

739

740

741

742

743

744

745

746

747

748

749

750

751

752

753

754

755

756

757

758

759

760

761

762

763

764

765

766

767

768

769

770

771

772

773

774

775

776

777

778

779

780

781

782

783

784

785

786

787

788

789

790

791

792

793

794

795

796

797

798

799

800

801

802

803

804

805

806

807

808

809

810

811

812

813

814

815

816

817

818

819

820

821

822

823

824

825

826

827

828

829

830

831

832

833

834

835

836

837

838

839

840

841

842

843

844

845

846

847

848

849

850

851

852

853

854

855

856

857

858

859

860

861

862

863

864

865

866

867

868

869

870

871

872

873

874

875

876

877

878

879

880

881

882

883

884

885

886

887

888

889

890

891

892

893

894

895

896

897

898

899

900

901

902

903

904

905

906

907

908

909

910

911

912

913

914

915

916

917

918

919

920

921

922

923

924

925

926

927

928

929

930

931

932

933

934

935

936

937

938

939

940

941

942

943

944

945

946

947

948

949

950

951

952

953

954

955

956

957

958

959

960

961

962

963

964

965

966

967

968

969

970

971

972

973

974

975

976

977

978

979

980

981

982

983

984

985

986

987

988

989

990

991

992

993

994

995

996

997

998

999

1000

1001

1002

1003

1004

1005

1006

1007

1008

1009

1010

1011

1012

1013

1014

1015

1016

1017

1018

1019

1020

1021

1022

1023

1024

1025

1026

1027

1028

1029

1030

1031

1032

1033

1034

1035

1036

1037

1038

1039

1040

1041

1042

1043

1044

1045

1046

1047

1048

1049

1050

1051

1052

1053

1054

1055

1056

1057

1058

1059

1060

1061

1062

1063

1064

1065

1066

1067

1068

1069

1070

1071

1072

1073

1074

1075

1076

1077

1078

1079

1080

1081

1082

1083

1084

1085

1086

1087

1088

1089

1090

1091

1092

1093

1094

1095

1096

1097

1098

1099

1100

1101

1102

1103

1104

1105

1106

1107

1108

1109

1110

1111

1112

1113

1114

1115

1116

1117

1118

1119

1120

1121

1122

1123

1124

1125

1126

1127

1128

1129

1130

1131

1132

1133

1134

1135

1136

1137

1138

1139

1140

1141

1142

1143

1144

1145

1146

1147

1148

1149

1150

1151

1152

1153

1154

1155

1156

1157

1158

1159

1160

1161

1162

1163

1164

1165

1166

1167

1168

1169

1170

1171

1172

1173

1174

1175

1176

1177

1178

1179

1180

1181

1182

1183

1184

1185

1186

1187

1188

1189

1190

1191

1192

1193

1194

1195

1196

1197

1198

1199

1200

1201

1202

1203

1204

1205

1206

1207

1208

1209

1210

1211

1212

1213

1214

1215

1216

1217

1218

1219

1220

1221

1222

1223

1224

1225

1226

1227

1228

1229

1230

1231

1232

1233

1234

1235

1236

1237

1238

1239

1240

1241

1242

1243

1244

1245

1246

1247

1248

1249

1250

1251

1252

1253

1254

1255

1256

1257

1258

1259

1260

1261

1262

1263

1264

1265

1266

1267

1268

1269

1270

1271

1272

1273

1274

1275

1276

1277

1278

1279

1280

1281

1282

1283

1284

1285

1286

1287

1288

1289

1290

1291

1292

1293

1294

1295

1296

1297

1298

1299

1300

1301

1302

1303

1304

1305

1306

1307

1308

1309

1310

1311

1312

1313

1314

1315

1316

1317

1318

1319

1320

1321

1322

1323

1324

1325

1326

1327

1328

1329

1330

1331

1332

1333

1334

1335

1336

1337

1338

1339

1340

1341

1342

1343

1344

1345

1346

1347

1348

1349

1350

1351

1352

1353

1354

1355

1356

1357

1358

1359

1360

1361

1362

1363

1364

1365

1366

1367

1368

1369

1370

1371

1372

1373

1374

1375

1376

1377

1378

1379

1380

1381

1382

1383

1384

1385

1386

1387

1388

1389

1390

1391

1392

1393

1394

1395

1396

1397

1398

1399

1400

1401

1402

1403

1404

1405

1406

1407

1408

1409

1410

1411

1412

1413

1414

1415

1416

1417

1418

1419

1420

1421

1422

1423

1424

1425

1426

1427

1428

1429

1430

1431

1432

1433

1434

1435

1436

1437

1438

1439

1440

1441

1442

1443

1444

1445

1446

1447

1448

1449

1450

1451

1452

1453

1454

1455

1456

1457

1458

1459

1460

1461

1462

1463

1464

1465

1466

1467

1468

1469

1470

1471

1472

1473

1474

1475

1476

1477

1478

1479

1480

1481

1

10

ca

PROCESSING AND PREPARATION INDEX

New series of homologs of the camphor group. X. Benzylidene-camphane, a product of the dehydration of tertiary benzylboranyl alcohol. S. S. Nametkin and M. K. Strugatski. *J. Gen. Chem.* (U. S. S. R.) 6, 902-7 (1936); *J. C. A.* 29, 3049. Heating 102 g. of benzylboranyl alc. (I) with an equimol. amt. of KHSO_4 at $150-160^\circ$ for 2-3 hrs. gave not the α -benzylcamphane, as was expected (II), but 93 g. benzylidene-camphane, $\text{C}_{15}\text{H}_{22}$, CHPh (II), m. 25° , b.p. $160-1^\circ$, d_4^{20} 0.9788, d_4^{25} 0.9755, n_D^{20} 1.5571. II oxidized with alk. KMnO_4 gave camphor, camphoric acid and BrOH . Phenyl- α -boranylcarbinol (cf. Hesse, *Ber.* 39, 1150 (1906)) (11 g.) was heated with 1.7 g. of K in dry PhMe for 40 hrs. and then treated with 10 g. of dry CS_2 . The xanthate treated with MeI and decompd. by heating at 160° gave a product identical with II obtained by dehydration of I. Chas. Blanc

45-55A METALLURGICAL LITERATURE CLASSIFICATION

STRUGATSKIY, M. R.

The Atomic Nucleus and Its Energy (Atomnoye yadro i ego energiya), 26 pp, 1951.

All-Union Correspondence Power Engineering Institute

Book W-22517, 20 Apr 52

1. STRUGATSKIY, M.K.
2. USSR (60-)
4. Science
7. Laboratory works in general chemistry. Moskva, "Sovetskaia nauka," 1952

9. Monthly List of Russian Accessions, Library of Congress, March, 1953. Unclassified.

STAROSSEL'SKIY, P.I.

STRUGATSKIY, Mikhail Konstantinovich; MADEINSKIY, Boris Pavlovich;
STAROSSEL'SKIY, P.I., otvetstvennyy red.; LIPKINA, T.G., red.izd-va;
POPRYADUKHIN, K.A., tekhn.red.

[General chemistry] Obshchaya khimiya. Moskva, Gos.izd-vo
"Sovetskaya nauka," 1957. 357 p. (MIRA 11:3)
(Chemistry)

STRUGATSKIY, Mikhail Konstantinovich; NADEINSKIY, Boris Pavlovich;
KHODZHAYEVA, I.V., red.; LIPKINA, T.G., red.izd-va; VORONINA,
R.K., tekhn.red.

[General chemistry] Obshchaia khimiia. Izd.2., perer. Moskva,
Gos.izd-vo "Vysshaia shkola," 1959. 388 p. (MIRA 13:5)
(Chemistry--Handbooks, manuals, etc.)

STRUGATSKIY, Mikhail Konstantinovich; NADEINSKIY, Boris Pavlovich;
TULUPOV, V.A., red.; AVRAMENKO, Ye.I., red.izd-va; GOROKHOVA, S.S.,
tekhn. red.

[General chemistry] Obshchaia khimiia. Izd.3., perer.i dop. Mo-
skva, Gos.izd-vo "Vysshiaia shkola," 1961. 415 p. (MIRA 14:12)
(Chemistry)

STRUGATSKIY, Mikhail Konstantinovich; MADEINSKIY, Boris Pavlovich;
STUKOVNIK, N.P., Eds.

[General chemistry] Obshchaya khimiya. Moskva, Vysshaya
shkola, 1965. 392 p. (MIRA 18:8)

CHUGATSKII, M.K.

[Chemistry: organic compounds; a manual for students
registering at the Institute] Khimiia; organicheskie
soedineniia. Uchebnoe posobie dlia postupaiushchikh
v institut. Moskva, Vses. zaochnyi energ. in-t, 1965.
43 p. (MIRA 19:1)

STRUGATSKIY, Yu.M., inzh. (Msokva)

Design of cylindrical shells of arbitrary section. Rasch. prostr.
konstr. no.8:309-324 '62. (MIRA 16:6)
(Elastic plates and shells)

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

STRUGOV, A.S.

USSR/ Geology - Ice action

Card 1/1 Pub. 86 - 25/36

Authors : Strugov, A. S.

Title : ~~Explosion of a "hydrolakkolith"~~
Explosion of a "hydrolakkolith"

Periodical : Priroda 44/6, page 117, Jun 1955

Abstract : A party of scientists conducting field observations eastward from lake Baikal in 1938 witnessed the explosion of a "hydrolakkolith," a cupola-shaped hillock caused by the underground formation of ice. The resulting cavity immediately filled with water forming a small lake. Illustration.

Institution :

Submitted :

STRUGOV, A.S.

Surface of the Jurassic bedrock and its correlation to sedimentation
in the Irkutsk coal-bearing basin. Izv.AN SSSR.Ser.geol. 20 no.6:42-45
N-D '55. (MLRA 9:2)
(Irkutsk Province--Geology, Stratigraphic)

15-57-7-9743

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 7,
p 148 (USSR)

AUTHOR: Strugov, A. S.

TITLE: Coal Potential and Coal Types in the Western Part of
the Vilyuysk Depression (Perspektivy ugleznosti i
kharakter ugley zapadnoy chasti Vilyuyskoy vpadiny)

PERIODICAL: Tr. Labor. geol. uglya AN SSSR, 1956, Nr 6, pp 580-590

ABSTRACT: The author presents a detailed stratigraphy of the
Mesozoic series (lower continental J_1^1 -- J_1^2 , marine
 J_1^3 -- J_2^1 , and upper continental J_2^2 -- J_3^3 -- Cr_1)
and in particular, of the upper series which contains
a large number of lignite coal seams. The substructure
of the Mesozoic is formed by the Paleozoic, while the
covering rock is composed of Quaternary deposits.
Tectonically, this region is a part of the Vilyuysk

Card 1/2

19-47-7-0744

, Coal Potential and Coal Types (Cont.)

depression. The Paleozoic is deformed into pitching folds. The deposits of the Mesozoic are almost horizontal. The tectonic processes occurring since the beginning of the Mesozoic are described in this article. The accumulation of the regional coal-bearing series was universal, but accumulation of organic substance occurred only in separate basins. The petrographic character and chemical composition of the coal types of the upper continental series show these coals to be typical lignites. Some data are given on other deposits and their coal potential.

Card 2/2

Ye. G. Martynov

STRUGOV, A.S.

Unt' Murkha coal-bearing area in the Vilyuy Valley. Trudy
L'vov SSSR. Ser. geol. no. 4: 136-150 '59. (MIRA 12:3)
(Vilyuy Valley--Coal geology)

STRUGOV, A.S.

Geology of the Kampendyay lignite deposit. Trudy IAFAN SSSR.
Ser.geol. no.4:151-154 '59. (MIRA 12:8)
(Kampendyay Valley--Lignite)

STRUGOV, A.S.

Petrography of coals of the Kempendyay deposits of the Vilyuy
Basin. Izv. Fiz.-khim. nauch.-issl. inst. Irk. un. 5 no.1:3-5 '61.
(MIRA 16:8)

(Vilyuy Basin—Coal) (Petrology)

LARINA, V.A.; STRUGOV, A.S.; GALAGANOVA, A.S.; KASHTANOVA, A.S.;
AZIMOVA, G.A.

Coals of the Kempendyay deposit, their composition and properties.
Izv. Fiz.-khim. nauch.-issl. inst. Irk. un. 5 no.1:6-12 '61.
(MIRA 16:8)

(Vilyuy Basin--Coal--Analysis)

STRUGOV, V.

Leaflet-calendar of engineer Volkov. Bezop.asida v prom. 7
no.3:29-30 Mr '63. (MIRA 16:3)
(Coal mines and mining--Safety measures)

STRUGOV, V.N.

Paddle vat for the processing of glue stock. Mon.-Wed.
prom. 4 no. 7:35 01 '68. MORI 17:1

STRUGOVETS, Ye.T.; REPIN, N.N.

Portable gas anchor. Mash. 1 neft. obor. no.5:33-34 '64.
(MIRA 17:6)

1. Ufinskiy neftyanoy nauchno-issledovatel'skiy institut.

EST AND TWO GROUPS

PROCESSES AND PROPERTIES

27

9

Comparative investigation of the quality of castings of metal cast killed and unkilld. A. P. Revbitsoy and D. P. Sinyavskikhova. *Ural. Ma.* 8, No. 1, 17-22 (1940); *Chem. Zentr.* 1940, II, 2335-6. — Tests were made on a killed-steel casting contg. C 0.09 0.1, Mn 0.43 0.44, Ti 0.005, Si trace and S and P 0.01-0.02% and on a steel cast unkilld contg. C 0.08 0.1, Mn 0.41 0.47, and S and P 0.01 0.03%. The casting from the killed steel showed practically the same content in nonmetallic inclusions with an essentially uniform distribution throughout the casting. Also, the distribution of C, Mn, P and S segregations was more uniform in this steel so that it was less vigorously attacked when etched by acids. In the case of the casting from the unkilld steel the middle portion with a higher content in segregations was especially vigorously attacked. Steel killed with Al and ferro-titanium showed least segregation (20-40%) with the most uniform distribution of the segregations and was least attacked by acids. The properties of the steel were not essentially affected by the addn. of 0.006 0.008% of Ti. As compared to steel cast in the unkilld condition, the grain structure was finer and the impact resistance and tensile strength were higher. M. G. Moore

ASB-55A METALLURGICAL LITERATURE CLASSIFICATION

2

B

Deoxidation of Low Carbon Rimming Steel Destined
for Heavy Deep Drawing. D. P. Strugovskikhov.

Henry Brucher (Altadena, Calif.), Translation No.
2136, 1948, 4 pages. From *Stal (Steel)*, v. 8, no. 2,
1948, p. 183.

Describes difficulties encountered with laminations
in low-carbon rimming steel; nature of white and
gray laminations; their avoidance by a suitable
deoxidizing practice; and gives details on new
deoxidizing practice.

ASTM-SLA METALLURGICAL LITERATURE CLASSIFICATION

12000 17000 18000 19000 20000 21000 22000 23000 24000 25000 26000 27000 28000 29000 30000 31000 32000 33000 34000 35000 36000 37000 38000 39000 40000 41000 42000 43000 44000 45000 46000 47000 48000 49000 50000 51000 52000 53000 54000 55000 56000 57000 58000 59000 60000 61000 62000 63000 64000 65000 66000 67000 68000 69000 70000 71000 72000 73000 74000 75000 76000 77000 78000 79000 80000 81000 82000 83000 84000 85000 86000 87000 88000 89000 90000 91000 92000 93000 94000 95000 96000 97000 98000 99000

9

C A

Effect of titanium in low-carbon steel. D. P. Strugovshchikov. *Stal* 8, 1131-2(1948).—From 0.02 to 0.06% of Ti was added to a rimmed steel and to a killed steel. From 0.02 to 0.04% of Ti did not interfere with the normal evolution of gases in a rimmed steel. Addn. of 0.06% reduced the gas evolution considerably. The FeO and N contents of rimmed steel were lowered by Ti. Other nonmetal inclusions were not affected. The Ti had no effect on segregation of C, S, and P, nor on the macro structure. The plastic properties of rimmed steel were affected adversely by Ti. In the killed steel, Ti induced greater and finer cast structure. Addn. of 0.11% Ti to steel killed with 0.11% Al increased the content of

impurities. Generally, the addn. of Ti to killed steel was beneficial. M. Hirsch

STRUGOVASHCHIKOV, D. P.

18/49T90

USSR/Metals

Dec 48

Steel, Carbon
Steel, Titanium

"Effect of Titanium on the Properties of Low-Carbon Steel," D. P. Strugovashchikov, Engr, Ural Inst of Ferrous Metals, 2 pp

"Stal'" No 12

Describes results of adding titanium to both bubble-containing and bubbleless low-carbon steels. Three tables show alteration in mechanical properties.

18/49T90

BTR

11632 *Proizvodstvo Malouglerodistoi Stali, (Production of Low Carbon Steel)*, D. P. Stingovskiy, 216 pages, 1984, Government Scientific Technical Publishing House for Literature on Ferrous and Nonferrous Metallurgy, Sverdlovsk and Moscow, U.S.S.R. (TN730-5889p)
Technology of the production of killed and un-killed low carbon steels is described in detail. Properties of steel, its flaws, and measures taken to eliminate them during melting and casting are also discussed, along with theoretical bases of the technology of melting and casting of steel.

STALVAR, D. I.

D. I. Strupovskiy, Stalvar, artenovsky pechi [The Open-Hearth Furnace Operator], Metallurgizdat, 2 sheets, 10,000 copies.

The booklet describes the raw material, fuel, refractory, and charging materials for the production of steel by the open-hearth process, the working principle of the open-hearth furnace, preparation for operation, tending during operation, and automatic regulation of the heat cycle of the open-hearth furnace. It discusses the theory and practice of the open-hearth process and of casting steel, as well as technical control methods for smelting and pouring steel. It also considers the defects of ingots and disorders in open-hearth plants, and measures for their prevention. The booklet also describes experience in rapid steel smelting, technico-economic work indexes, and the basic problems of accident prevention in open-hearth plants.

The booklet is intended as a training aid for steel workers and apprentice steel workers.

SO: U-6472, 12 Nov 1954

STRUGOVSHCHIKOV, D.P.

[Steel-makers working at open-hearth furnaces; aid to steel-makers and their assistants] Stalevar martenovskoi pechi; uchebnoe posobie dlia stalevarov i ikh podruchnykh. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-ry po cherno i tsvetnoi metallurgii, 1953. 351 p. (MLRA 7:6)
(Open-hearth process)

STRUGOVSHCHIKOV, Dmitriy Pavlovich; DUBROV, N.F., redaktor; KEL'NIK, V.P.,
redaktor izdatel'stva; KOVALENKO, N.I., tekhnicheskii redaktor

[Steel casting; a technical manual] Razlivka stali; uchebnoe posobie
dlia proizvodstvenno-tekhnicheskogo obucheniia rabochikh. Sverdlovsk,
Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii,
Sverdlovskoe ot-nie, 1956. 192 p. (MIRA 9:11)
(Steel--Metallurgy)

BURDAKOV, D.D.; PANFILOV, M.I.; MEDVEDEV, I.P.; ~~STRUCHOVSHCHIKOV, D.P.~~; NIKOLAYEV,
A.M.; KRASNOV, K.V.

Ways to expand old plants in the Urals. Stal' 16 no.9:818-820 S '56.
(MIRA 9:11)

1. Glavuralmet Ministerstva chernoy metallurgii SSSR.
(Ural Mountain region--Metallurgical plants)

18(3,5)

PHASE I BOOK EXPLOITATION

SOV/2585

Strugovshchikov, Dmitriy Pavlovich

Proizvodstvo malouglerodistoy stali (Manufacture of Low-carbon Steel) 2d ed., rev. and enl. Sverdlovsk, Metallurgizdat, 1959. 302 p. Errata slip inserted. 3,000 copies printed.

Ed.: N.F. Dubrov; Ed. of Publishing House: V.P. Kel'nik; Tech. Ed.: Ye.M. Zef.

PURPOSE: This book is intended for engineers and technicians in open-hearth plants and may also be useful to qualified steel workers.

COVERAGE: The book describes the processes of making rimmed and killed low-carbon steel. Properties of steel and steel defects (shrinkage cavities) are discussed, and methods of preventing the latter during the melting process are recommended. Both theoretical and practical data are given on the melting and teeming processes. Quality control of liquid steel and teemed ingots is discussed. Some information is also given on the pro-

Card 1/8

Manufacture (Cont.)

SOV/2585

duction of a number of types of low-carbon, low-alloy, and silicon transformer steel. There are 71 references, all Soviet.

TABLE OF CONTENTS:

Introduction	3
Ch. I. Production of Low-carbon Rimmed Steel	5
Preparation of the furnace for melting	5
Fettling of furnace	5
Thermal conditions during the fettling period	10
Charging the furnace	10
Charge materials and burdening	10
Sequence of charging operations	12
Duration and thermal conditions of the charging period	16
Heating of the charge throughout and addition of pig iron	17
Melting of the charge and slag runoff	18
Finishing the heat (refining)	24

Card 2/8

STRUGOVSHCHIKOV, Dmitriy Pavlovich; NOVOLODSKIY, P.I., retsenzent; CHAPAYKINA, F.K., red.izd-va; TURKINA, Ye.D., tekhn. red.

[Steel casting; textbook for the training of qualified production workers] Razlivka stali; uchebnoe posobie dlia podgotovki kvalifitsirovannykh rabochikh na proizvodstve. Izd.2., ispr. i dop. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1961. 176 p. (MIRA 14:7)
(Steel castings)

GREBINSKIY, S.O.; STRUGOVSHCHIKOVA, L.P.; LITEPLO, Ye.I.

Effect of high doses of X rays on the growth and metabolism
of physiologically active substances in pea sprouts. Dokl.
AN SSSR 146 no.2:471-474 S '62. (MIRA 15:9)

1. L'vovskiy gosudarstvennyy universitet im. I. Franko.
Predstavleno akademikom A.L. Kursanovym.
(Plants, Effect of X rays on)
(Growth promoting substances)

STRUGOVSHCHIKOVA, L.P.

rabvine formation in some species of yeast of the genus Candida.
Mikrobiologiya 34 no.43617-622 J. Aug '65.

(MIRA 18:10)

1. Biologicheskij fakul'tet Lvovskogo gosudarstvennogo universiteta
imeni Iv. Franko.

BARYSHEV, P.M.; STRUGUSHCHENKO, Yu.M.; KHOMUTOV, T.Ya.

Therapeutic effectiveness of leptospirous γ -globulin; studies
in Krasnodar Territory. Soy. med. 27 no.1:116-120 Ja '64.
(MIRA 17:12)

1. Laboratoriya leptospirozov (zav.- prof. A.A. Varfolomeyeva)
Moskovskogo nauchno-issledovatel'skogo instituta vaktsin i syvorotok
imeni I.I. Mechnikova, kafedra epidemiologii (zav.- prof. V.V.
Skvortsov) II Moskovskogo meditsinskogo instituta imeni N.I.
Pirogova i Grivenskaya uchastkovaya bol'nitsa (glavnyy vrach
T.Ya. Khomutov) Krasnodarskogo kraya.

STRUNAC, J.

Adjustment of the SKEN-e combine for sugar-beet harvesting. p. 376.
(MECHANISACE ZEMEDELSTVI, Vol. 7, No. 16, Aug 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

MANDAK, M.; STRUHAR, M.

Determination of sulfur in ichthammol and some preparations containing ichthammol. Cesk. farm. 10 no.9:456-459 '61.

1. Katedra galenickej farmacie Farmaceutickej fakulty UK, Bratislava.
(ICHTHAMMOL chem) (SULFUR chem)

MANDAK, Milan, doc., PhMr. (Bratislava, Ulica Odborarov 12); STRUHAR,
Milan, LICNEROVA, Irena

Use of surface active agents in the preparation of extracts
from drugs. Acta pharmac 6:127-146 '62

1. Department of Galenical Pharmacy, Faculty of Pharmacy,
Bratislava.

MANDAK, Milan, doc. PhMr (Bratislava, Ulica Odbojarov 12); STRUHAR, Milan

Some possibilities to determine alkaloids in the Tinctura belladonae, Extractum Belladonae exsiccatum and Extractum hyoscyami exsiccatum. Acta pharmac 6:147-165 '62

1. Department of Galenical Pharmacy, Faculty of Pharmacy, Bratislava.

CCOR

MANDAK, L.; STRUHAR, M.; KLUCAROVA, H.

Dept. of Galenic Pharmacy, Pharmaceutical Faculty, Charles University (Katedra
Galenické farmacie Farmaceutické fakulty UK), Bratislava

Bratislava, Farmaceutický Obzor, No 3, 1963, pp 97-105

"Contribution to the Determination of Tropane Alkaloids in Some Galenic
Preparations"

(3)

2
CZECHOSLOVAKIA

STRUHAR, M; LANTAK, M; POBOCIKOVA, E.

Chair of Galenic Pharmacy of the Pharmaceutical Faculty UK
(Katedra galenickej farmacie Farmaceutickej fakulty UK),
Bratislava (for all)

Bratislava, Farmaceuticky obzor, No 4, 1963, pp 153-156

"Content of Some Galenic Preparations of Rhubarb Roots."

f
CZECHOSLOVAKIA

STRUMAR, M; MIKROVA, A.

Chair of Galenic Pharmacy of the Pharmaceutical Faculty
of UK (Katedra galenickej farmacie Farmaceutickej
Fakulty UK), Bratislava (for both)

Bratislava, Farmaceuticky obzor, No 6, 1963, pp 249-255

"Study of the Stability of Water Solutions of Atropinsulphate."

STROUHAR, Milan, promovany farmaceut, CSc. (Bratislava, Ul. Gdbojarov 12)

Contribution to the stability of aqueous atropine sulfate solutions. Acta pharmac 9: 9-118 '64.

1. Chair of Galenical Pharmacy of the Faculty of Pharmacy, Bratislava.

STRUHELKA, Frantisek

Reducing the work involved by material incentives. Prace mzda
10 no.12:555-559 D '62.

1. Clen Zavodniho vyboru Revolucniho odboroveho hnuti, Zavody
Rijnove revoluce, n.p., zavod Uhersky Brod.

ROMANIA

GRIGOR, Gena, Lecturer; STANIL, Ivan, MD.

Section of Public Health, Faculty of Medicine and Pharmacy,
Bucharest. (Catedra de medicina publica, I.M.F.) (Head of
Section: Professor T. Alina.) - (For all)

Bucharest, Viata Medicala, No 7, 1 Apr 63, pp 461-468.

"Problems of Ambulatory Medical Assistance for the Urban
Population."

(2)

ZHANTEMIROV, S., inzh.; USENOV, S., inzh.; STRUIKHIN, V., inzh.

Rapid increase of mining depth in building the Sarbay open-pit mine of the Sokolovka-Sarbay Mining and Ore Dressing Combine.
Izv. vys. ucheb. zav.; gor. zhur. no.10:40-47 '61.
(MIRA 15:10)

1. Sokolovsko-Sarbayskiy gornooobogatitel'nyy kombinat. Rekomendovana kafedroy otkrytykh rabot Sverdlovskogo gornogo instituta.

(Kustanay Province—Strip mining)

STRUIKHIN, V.N., gornyy inzh.-marksheyder

Observations of landslides in the Sarbay open-pit mine. Gor. zhur no.4:
69-70 Ap '63. (MIRA 16:4)

(Kustanay Province—Landslides)

PLYASKIN, I. I., kand. tekhn. nauk; STRUIKHIN, V. N., gornyy inzh.-
marksheyder

Working inundated horizons of the Sarbay open-pit mine. Gor.
zhur. no.10:11-12 0 '62. (MIRA 15:10)

1. Filial Kazakhskogo politekhnicheskogo instituta, g. Rudnyy
(for Plyaskin). 2. Sarbayskiy kar'yer (for Struikhin).

(Kustanay Province—Mine drainage)

PHASE I BOOK EXPLOITATION SOV/5743

14

Akademii nauk SSSR. Mezhdunarodnyy komitet po provedeniyu
Mezhdunarodnogo geofizicheskogo goda. V, razdel programmy IIGG:
Ionosfera.

Issledovaniya ionosfery; sbornik statey (Ionospheric Researches;
Collected Articles. No. 3) Moscow, Izd-vo AN USSR, 1960.
100 p. 2,000 copies printed.

Resp. Ed.: N. V. Mednikov, Candidate of Physics and Mathematics;
Ed.: L. A. Trofimova; Tech. Ed.: T. V. Polyakova.

PURPOSE : This IGY publication is intended for geophysicists,
astrophysicists, and other scientists concerned with the
ionosphere and radio atmospherics.

COVERAGE: The collection of articles contains the results of
investigations on the ionosphere and radio atmospherics, based
chiefly on IGY observational data from USSR stations. The
articles may be grouped into the three following categories:

Card 1/5

Ionospheric Researches; Collected (Cont.)

SOV/5743

14

1) studies of the morphology and physics of both quiet and perturbed ionospheres; 2) methodology of evaluating absorption and drifts in the ionosphere; and 3) questions on the use of ionospheric observations for practical purposes. No personalities are mentioned. English abstracts and references follow each article.

TABLE OF CONTENTS:

Foreword

Shapiro, B. S. An Investigation of the Distribution of Ionization With Height

5

Kessenikh, V. N. Certain Peculiarities in the Geographic Distribution of the Maximum Electron Concentration in the F-2 Layer Over the Urals, Siberia, the North Caucasus, and Soviet Central Asia (1957-1958)

7

18

Card 2/5

Ionospheric Researches; Collected (Cont.)	SOV/5743	14
Korblay, T. S., and Ye. M. Kovalevskaya. Correlation of foF2 With Solar Activity Indices		22
Driatskiy, V. M. Processes in the Lower Ionosphere in High Latitudes During the Solar Flare of February 23, 1956		27
Pel'dchteyn, Ya. I. The Nocturnal E-Layer According to Observations at the Dikson Island Observatory		34
Pankratova, N. S. Irregular Phenomena in the F-Region of the Ionosphere According to Observations at the Dikson Island Observatory		40
Cherenkova, Ye. P. Certain Regularities in the Behavior of the Lower Ionosphere Over Dikson Island		51
Gorbushina, G. N. On the Use of Single Reflections for Evaluating Absorption in the Ionosphere According to Observations at Dikson Island		60

Card 3/5